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Tabl. I. – Metrical and meristical characteristics of the studied specimens : SL, standard length; H.L., head length; Pr.O.L., pre-orbital length; O., orbital length; Po O.L. post-orbital length; I.O., inter-orbital width; Sc.L.L., number of scales in the lateral line; Sc.T1, number of scales in the lower transversal line; Sc.T2, number of scales in the upper transversal line; D., number of soft rays in the dorsal fin; A., number of soft rays in the anal fin; N., number of specimens studied; $\bar{X}$, means; S, standard deviation; Max., maximum value; Min., minimum value.

	N	$\bar{X}$	S	Max.	Min.
S.L.	42	179.6	53.9	312.0	140.6
H.L.	42	42.8	11.5	74.7	30.0
Pr. O.L.	42	11.9	3.5	22.8	7.8
O.	42	8.4	5.4	12.0	6.3
Po. O.L.	42	22.3	6.4	40.0	15.0
I.O.	42	17.2	4.8	30.4	12.0
Sc. L.L.	42	45.5	1.5	50.0	42.0
Sc. T1	42	9.2	0.8	11.0	8.0
Sc. T2	42	4.4	0.5	6.0	4.0
D.	42	8.4	0.5	9.0	7.0
A.	42	8.5	0.5	9.0	8.0

CHROMIS VIRIDIS (CUVIER, 1830), THE CORRECT NAME FOR THE INDO-PACIFIC DAMSELFISH PREVIOUSLY KNOWN AS *C. CAERULEA* CUVIER, 1830) (PISCES, POMACENTRIDAE.

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Abstract. – Examination of the two syntypes of *Heliases caeruleus* Cuvier, 1830 (MNHN 5644) revealed them to be a pomacentrid fish long identified as *Chromis ternatensis* (Bleeker, 1853). The valid name for the wide-ranging, blue-green *Chromis* which has been known as *C. caerulea* is *C. viridis* (Cuvier, 1830), based on color painting by Ehrenberg of a fish from Massaua, Red Sea.

Résumé. – L'examen de deux exemplaires MNHN 5644, syntypes de *Heliases caeruleus* Cuvier, 1830, a révélé qu'ils appartenaient à l'espèce connue sous le nom de *Chromis ternatensis* (Bleeker, 1853). Le nom valide du *Chromis* bleu-vert largement distribué dans les mers chaudes et connu jusqu'alors comme *Chromis caerulea* est *C. viridis* (Cuvier, 1830), espèce fondée sur une figure colorée, faite par Ehrenberg, d'un petit poisson de Massuah, mer Rouge.

Cuvier in Cuvier and Valenciennes (1830, V: 497) named *Chromis caerulea* (as *Heliases caeruleus*) from specimens collected in New Guinea by Quoy and Gaimard. He described the color in alcohol as brown violet with a blackish band on the upper and lower borders of the caudal fin. He assumed that a « belle figure » from the Russian expedition represented the same species, describing the color from this painting as follows : « d'un beau bleu d'azur; que la partie épineuse de sa dorsale est d'un brun violet; la molle, ainsi que l'anale, gris noirâtre; sa caudale jaune, à bord supérieur et inférieur noirâtre, et les pectorales et les ventrales jaunes ».

The copy of the original drawing by Mertens is deposited in the manuscripts of the Histoire naturelle des Poissons by Cuvier and Valenciennes (MS 490 V^{B} 135, Bibl. Centr. Museum).

Cybium 1985, 9(4) : 411-413.

On the following page Cuvier described two more species of *Heliases* : *lepisurus* and *frenatus*. Günther (1862) recognized these three Cuvier species of *Heliases* (though misspelled *lepisurus* as *lepidurus*), and placed *Glyphisodon bandanensis* Bleeker in the synonymy of the last-mentioned species. Bleeker (1877), however, regarded all four as one species, *Chromis lepisurus*.

The type specimens of *Heliases caeruleus*, *lepisurus* and *frenatus* are in the Museum National d'Histoire Naturelle in Paris, respectively registered MNHN 5644, MNHN 8254, MNHN A.253 and 5744.

After correspondence with Dr Léon Vaillant about these types, Jordan and Seale (1906) also regarded them as synonymous but selected the name *Chromis caeruleus* for the species. Although the name *caeruleus* appeared on an earlier page than *lepisurus* and *frenatus*, they were mistaken in using it. Bleeker, as the first to publish the three *Chromis* names from Cuvier (1830) as synonyms, chose the name *lepisurus*; his decision, as first revisor, takes precedence over the page priority of *caeruleus*.

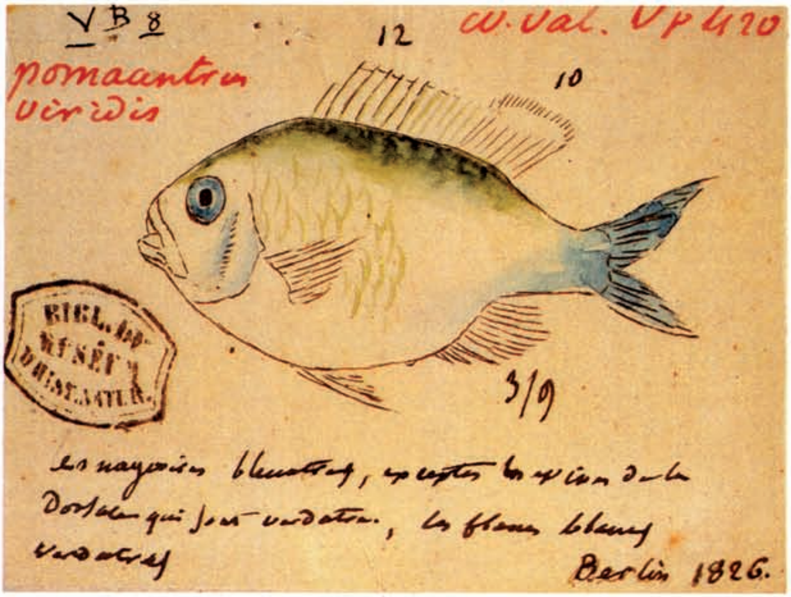
There is an even more fundamental reason why the name *caeruleus* is invalid for this species of *Chromis*. We recently examined the two syntypes of *Heliases caeruleus* (MNHN 5644, 49 and 58 mm SL) and determined that they are the Indo-Pacific species widely known as *Chromis ternatensis* (Bleeker, 1853). Compared to the fish that has been called *C. caeruleus*, *C. ternatensis* is a relatively drab species. Randall *at al.* (1981) described the life color as « olivaceous to dark yellowish grey, shading to whitish ventrally, the centers of the scales with a light bluish iridescence ;... caudal fin with a broad black margin on lobes... ». The species that recent authors have called *Chromis caerulea* (following Emery, 1975, who contends that *Chromis* is feminine) does not have dark margins on the caudal fin lobes ; it is a lovely blue-green overall (Plate I B). In view of Cuvier's specific mention of the black band on the margin of the caudal lobes in his description of *Heliases caeruleus*, it is surprising that the conspecificity of *caerulea* and *ternatensis* has not been noted previously.

It would be a great source of confusion to apply the widely used pomacentrid name *Chromis caerulea* to another common wide-ranging *Chromis* whose name *ternatensis* has long been established, especially since the latter is not a blue fish. We have therefore petitioned the International Commission on Zoological Nomenclature to suppress *caerulea* in favor of *ternatensis*.

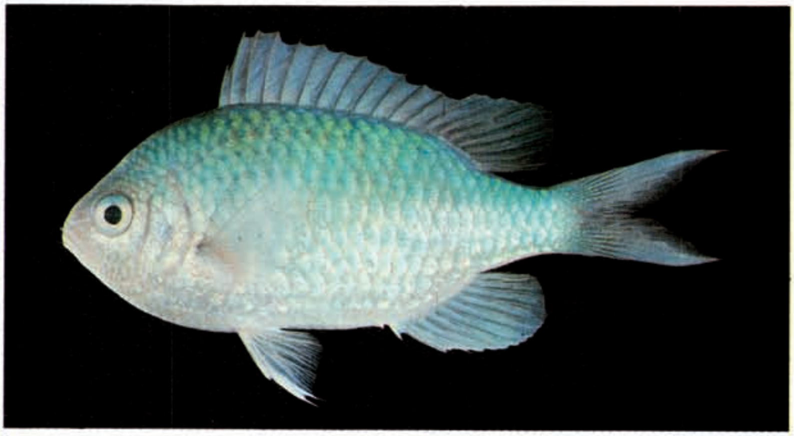
Looking through the earlier part of the Pomacentridae as treated by Cuvier in volume V of Histoire Naturelle des Poissons, we came upon the long-neglected description of *Pomacentrus viridis* (page 420). This species was described from two color paintings, one by Ehrenberg of a fish from Massaua, Red Sea and the other by Mertens of a specimen from Guam. The color was given by Cuvier as « entièrement d'un beau vert d'algue-marine, plus pâle en dessous, plus bleu au dos et à la caudale, qui est fortement taillée en croissant. » The fin-ray counts were recorded as D XII,10; A III,9. The length of both fish was given as less than « trois pouces » (= 81.2 mm). Cuvier attributed the authorship of *Pomacentrus viridis* to Ehrenberg. Therefore, Ehrenberg's painting, and not that of Mertens, is the basis for the name. The copy of this painting, reproduced herein as Plate I A, was found in the Bibliothèque Centrale du Museum, Paris, in the manuscripts of the Histoire Naturelle des Poissons (MS 490 V^B 8) as was that of Mertens (MS 490 V^B 9). In view of the Guam locality, Mertens' painting could be either the species known as *Chromis caerulea* or *C. atripectoralis* Welander and Schultz, 1951 (for a distinction of these two related species, see Allen, 1975 or Randall *et al.*, 1981). Since *C. atripectoralis* is not known from the Red Sea, the Ehrenberg painting can confidently be identified as the same species as the *caerulea* of many authors.

We here designate this painting as the lectotype of *Pomacentrus viridis*. The decision of Bleeker, as first revisor, to select *Heliases lepisurus* as the valid name among the three Cuvier names he recognized as synonymous has no bearing on our present recognition of *viridis* because Bleeker was unaware that *Pomacentrus viridis* Cuvier was also this species.

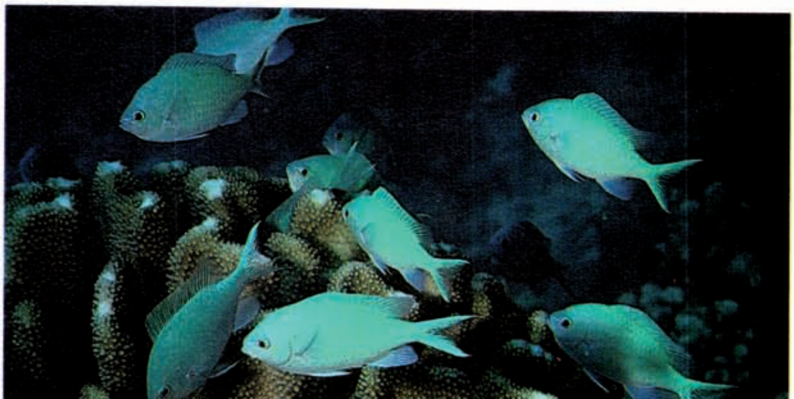
Chromis viridis is one of the most abundant of coral reef fishes. It is easily collected and well represented by specimens in museums. It occurs throughout the Indo-pacific region from the Red Sea and coast of East Africa to French Polynesia. Typically it is found on shallow protected reefs. Aggregations may be seen feeding on zooplankton in the water column above branching corals (especially *Acropora* spp) into which individual fish take refuge with


VB 8
12
Cu. Val. V p 420
pomacentrus
viridis
10
BIBL. DU MUSÉUM D'HIST. NATUR.
3/9
les nageoires bleuâtres, exceptés les rayons de la Dorsale qui sont verdâtres, les flancs blancs verdâtres
Berlin 1826.

A. Painting of *Pomacentrus viridis* from Massaua, Red Sea by Ehrenberg.



B. *Chromis viridis.* BPBM 6322, 69 mm SL, Enewetak, Marshall Islands.



the approach of danger (Plate I C). Hiatt and Strasburg (1960) reported on the food habits from 11 specimens collected in the Marshall Islands. The fish had eaten mainly copepods, crustacean larvae, and their own ova. Swerdloff (1970) described the spawning of *C. viridis* and illustrated a developing ovum.

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